

OREGON NPDES PROGRAM REVIEW

EXECUTIVE SUMMARY

Review Background

EPA Region 10 conducted a comprehensive review of the Oregon Department of Environmental Quality (DEQ) National Pollutant Discharge Elimination System (NPDES) permitting program. Region 10 conducted the review as part of its responsibility under the Clean Water Act to conduct oversight of programs which have been delegated to state agencies. Other factors influencing EPA's comprehensive review include a national directive to reduce the backlog of expired NPDES permits and also an increased emphasis by EPA to provide oversight of delegated programs not recently reviewed by EPA. The last comprehensive (programmatic and enforcement) review of the Oregon NPDES program was in 1995.

EPA initiated the review in late 2002 with a request to DEQ's Surface Water Management Program to submit relevant program description and background information. The background request included description of permit processes, procedures, guidance, resources, organizational description, permit status reports, and permit issuance plans among other information. EPA met with DEQ central office and regional office management staff in early 2003 to coordinate data submittals and conduct the review. During the summer and fall of 2003, an EPA review team spent one week at each of the three DEQ regional offices. During the regional office visits EPA interviewed permit management, administrative, enforcement and permit writing staff while also conducting extensive permit record reviews. EPA reviewed a broad cross section of recently issued permits (approximately 20 permit records per region).

EPA Region 10 appreciates the cooperation of DEQ management and staff at both the central office and in the regions in conducting this review. The assistance provided in planning for the review and the willingness to share information and cooperate fully in the review process resulted in a better understanding of the NPDES program being administered in Oregon and the challenges faced by DEQ. EPA looks forward to continuing to work cooperatively with DEQ to address issues identified in this report.

Oregon Program

DEQ received delegation and has been implementing the NPDES program since the early 1970's. The initial Memorandum of Agreement between EPA and DEQ establishing permitting procedures was signed on September 20, 1973, making Oregon one of the first states to receive delegation. DEQ is a decentralized program in that there is a central headquarters office responsible for statewide permitting functions and three regional offices which each administer programs to issue and monitor permits. Each region manages the NPDES permits independently and each is organized somewhat differently. Statewide, Oregon has 78 major individual NPDES facilities, 285 minor individual permitted facilities, and 13 non-stormwater general permit which cover 582 facilities. There is also a stormwater program which provides coverage for permittees.

Findings

Although the review was wide ranging and comprehensive, this report groups the findings into three categories: Program administration, permit quality, and enforcement/compliance. This executive summary provides the key findings of each section followed by a list of program strengths and opportunities for improvement. The summary also provides a short list of recommendations and follow-up actions.

Program Administration Findings

DEQ reorganized the permit program in the mid 1990's and moved to a more decentralized organization. Decentralization in part is a strength of the program in that the permit writer and compliance staff are closer to the permitted facility than if they were located in the central office. This allows the permit staff to gain a working knowledge of the facility and to provide the best service and also allows the region the ability to tailor the program somewhat to localized needs. Review of permit administrative records demonstrates that DEQ NPDES staff have a high level of communication with the facilities and provide a great degree of permit assistance and support relative to other NPDES programs administered by EPA Region 10.

The program review did, however, find that decentralization also presents unique challenges to DEQ particularly in the area of consistent permit quality across the state. EPA found that permit quality and some other elements of the NPDES program are not implemented consistently from one region to the next. There is a significant need for guidance and procedures, permit writing tools, and permit writer training to be developed and implemented on a statewide basis in order to achieve permits of consistent high quality statewide. DEQ has recently issued statewide policy in specific program areas. DEQ needs to continue to take steps so that the quality of permits is consistent across the state.

All DEQ regions have similar procedures for receiving and processing NPDES applications and permits. The processing of permits from application to final and the Source Information System permit database which is available to the public online are examples of NPDES program strengths in Oregon.

Oregon has a NPDES permit backlog of x% for major facilities and a backlog of y% for minor NPDES facilities. Since general permits cover a large number of facilities, the overall facility backlog for the state with inclusion of the general permits is x%. EPA's national target is for a backlog of 10% for each of the above categories. EPA review of recently issued permits confirm that reissued permits in Oregon result in improved permit language and environmental gains. Addressing the backlog issue in Oregon will result in environmental benefits as a result of updated permits. DEQ has made a concerted effort to address the backlog problem by making permit issuance the highest priority, developing regional plans including a watershed basin approach, shifting resources, seeking additional resources, and identifying bottlenecks in the permit issuance process (see Oregon Wastewater Permitting Improvement Team Report, 2001). EPA fully supports these efforts, however, the backlog of expired permits and the ability to achieve national backlog targets remain a concern to EPA. Through quarterly reports EPA will continue to track DEQ progress towards reducing the backlog.

EPA gathered information regarding program resources but did not conduct a thorough independent analysis. The best available EPA resource tool is the EPA Workload Model. DEQ

ran this model in 2001 and found existing resources available in Oregon is less than the model would predict is necessary to issue all of Oregon's NPDES permits over the five year cycle. EPA concurs with DEQ's use of the model and the caveat that these are estimates to be used as benchmarks. EPA also compared EPA Region 10 resources to DEQ's program and resources, however, comparisons are difficult due to significant organizational differences. Generally, a DEQ permit staff person is responsible for not only NPDES permits but also state permits and enforcement responsibilities for both programs. Oregon permit staff often serve other functions within the region such as managing wastewater grants for example. Since staff generally serve many roles, non-permit writing tasks such as technical assistance or responding to complaints often take precedence and make comparison to other programs difficult. Given these competing demands, resources dedicated to permit writing on paper are likely overestimates of actual resources in the regions dedicated to permit writing. EPA agrees with DEQ that resources are generally short of what is necessary to meet program goals, but EPA is not positioned to quantify the shortfall.????

Permit Quality Findings

EPA found that the quality of permits has improved since the last program audit in 1995, particularly with respect to efforts to issue permits that include conditions to protect Oregon water quality standards (water-quality based permit limitations). There are examples in each region of recently issued permits that include water quality analysis and water-quality based limits. In addition, EPA did find a number of other examples of DEQ strengths related to permit quality: DEQ has the capability to conduct mixing zone modeling and analysis and develop limits based on modeling results, municipal permits require cities to address inflow and infiltration problems in many communities, recently issued pulp and paper permits meet federal permit requirements, many permits are requiring alternatives to surface water discharge during the summer season when temperature impairment is an issue.

The report identifies a number of areas where opportunities exist for DEQ to improve permit quality. The most significant is that water-quality based permitting procedures need to be implemented consistently across the state. Review of files demonstrated variability in applying and interpreting water-quality based procedures among the regional offices. Also related to protection of state water quality standards, municipal permits were found to routinely include evaluation and limits for chlorine in every region, however, other parameters associated with municipal discharges are not routinely evaluated. Discharge parameters such as ammonia and metals in cities with industrial contributors are required to be evaluated for the potential of the municipal discharge to contribute to exceedance of water quality standards for these parameters.

In addition to water quality based issues EPA found other areas of permit quality where improvements could be made. EPA found examples of DEQ permit evaluations where it was demonstrated that the discharge from the facility has the potential to cause an exceedance of a water quality standard yet the permit would not include a limitation but instead require additional monitoring. Discharges which demonstrate a potential to cause exceedances must include permit limitations for the parameter. EPA also found that many of the industrial permits are reissued with technology-based permit requirements which were calculated during a previous permit cycle, sometime ten to fifteen years previous. Industrial permits should be reissued with updated process information and also evaluated for potential to cause water quality exceedances in the

receiving water.

Wet weather... wet weather issues are not significant in the dry eastern region and handled very consistently West of the Cascades. Municipal permits frequently include the authorization to discharge untreated wastewater through emergency overflow outfalls. DEQ's approach is taken from state regulation which allows overflow discharges during certain prescribed infrequent high rainfall events. EPA has reviewed Oregon's water quality regulations and finds that discharge of raw sewage is prohibited and, therefore, NPDES permits should not include authorization for this discharge ... stormwater...

Enforcement/Compliance Findings

The enforcement/compliance program is the final area evaluated in the report. EPA generally found DEQ to

DEQs lack of a data management system is a significant program deficiency which inhibits evaluation of the adequacy of the enforcement compliance program. A data management system would be a valuable tool for permit compliance staff and add consistency for data management across the state. The current tracking system (?SIS) successfully tracks permit dates and is a valuable tool to evaluate overall permit program progress but does not allow tracking of submitted data and hence compliance with permit conditions.

Mutual Agreement Orders (MAO's) are used by DEQ to provide time needed by facilities to come into compliance with permit limitations. EPA found that MAO's are not applied consistently across the state and some MAO terms are inconsistent with the Clean Water Act. DEQ should develop tools (statewide policy or templates) to ensure that MAO's are implemented consistently throughout the state and to aid permit staff. Some MAOs contain provisions which are inconsistent with the CWA and with the compliance schedule section of the NPDES regulations which can be used as guidance in this case. Some issues of concern to EPA include: the time to come into compliance extends beyond that allowed by the CWA (ie time for technology based limits for POTWs), time to comply extends well beyond the permit term, final compliance date is uncertain, and interim limits are insignificant.

Summary

To summarize, the following is a list of program strengths and areas for improvement identified as a result of this review:

Strengths:

- ▶ Decentralized permitting allows permit staff to work closely with permittees and enhances the staff's ability to provide service. DEQ has developed a dedicated and competent team of permit staff and management across the state.
- ▶ All DEQ regions have similar procedures for receiving and processing NPDES applications and permits. DEQ successfully tracks permit dates through the Source Information System which is available to the public online.
- ▶ DEQ has made a concerted effort to address the backlog by making permit issuance the highest priority, developing regional plans including a watershed basin approach, shifting

- resources, and identifying bottlenecks in the permit issuance process.
- ▶ Efforts to issue permits protective of Oregon water quality standards have improved since the last NPDES program audit.
 - ▶ DEQ capability to develop/analyze mixing zones, to address inflow and infiltration problems through permits, the recent issuance of pulp and paper permits, and encouraging alternatives to surface water discharges are all program strengths.
 - ▶ Enforcement..

Opportunities for Improvements:

- ▶ DEQ needs to take steps so that the quality of permits is consistent across the state. DEQ needs guidance and procedures, permit writing tools, and permit writer training to be developed and implemented on a statewide basis in order to achieve permits of consistent high quality statewide.
- ▶ The backlog of expired permits remains a significant concern to EPA.
- ▶ Numerous shortcomings with regard to water-quality based permitting were identified in specific permit actions across the state.
- ▶ Discharge of overflows which may contain raw sewage are authorized under certain rare storm events in NPDES permits.
- ▶ storm water??
- ▶ DEQs lack of a data management system is a significant program deficiency which inhibits evaluation of the adequacy of the enforcement compliance program
- ▶ Mutual Agreement Orders (MAO's) are not applied consistently across the state and some MAO terms are inconsistent with the Clean Water Act.

EPA believes that the most significant opportunity for improvement that should continue to be followed and addressed is the permit backlog..... and consistency (WQ permitting and MAO's)

Improving central role of DEQ - guidance etc - help in backlog and consistency problem

EPA intends to continue to work cooperatively with DEQ to address the issues identified in this report by - PPA - establish line of communication - have regular feedback on NPDES issues of mutual concern...